

Amendments to the Claims

The following listed claims will replace all prior claims in the application

Claim 1 (Currently Amended)

1. A fluorescence microscope having at least one exchangeable filter insert (12) and at least one illumination device (1) having at least one light source (22), wherein the filter insert (12) is coupled by means of a coupling ~~mechanical and/or electrical and/or optical and/or magnetic~~ apparatus (19) to the illumination device (1) so that in ~~the~~ an operating state, no excitation illumination occurs in the fluorescence microscope without ~~[[a]]~~ said filter insert (12) in ~~[[the]]~~ a working position.

Claim 2 (Currently Amended)

2. The fluorescence microscope as defined in Claim 1, wherein in the operating state, current delivery to the excitation light source (22) is switchable by means of the coupling ~~mechanical and/or electrical and/or optical and/or mechanical~~ apparatus (19) by insertion or removal of the filter insert (12).

Claim 3 (Currently Amended)

3. The fluorescence microscope as defined in Claim 1, wherein upon insertion of the filter insert (12), a dimmer for the excitation light source (22) is switchable by insertion or removal of the filter insert (12) by means of the coupling ~~mechanical and/or electrical and/or optical and/or magnetic~~ apparatus (19).

Claim 4 (Currently Amended)

4. The fluorescence microscope as defined in Claim 1, wherein upon insertion of the filter insert (12), a shutter (6) for ~~[[the]]~~ an illumination beam path ~~[[2a]]~~ (2b) is switchable by insertion or removal of the filter insert (12) by means of the coupling ~~mechanical and/or electrical and/or optical and/or magnetic~~ apparatus (19).

Claim 5 (Currently Amended)

5. The fluorescence microscope as defined in Claim 4, wherein in the operating state the shutter (6) is switchable by means of an electric motor (9) ~~or electromagnet~~.

Claim 6 (Currently Amended)

6. The fluorescence microscope as defined in Claim 5, wherein in the operating state the shutter (6) can be opened and held open by means of the electric motor (9) ~~or electromagnet~~ only when the electrical circuit necessary therefor is closed by the apparatus (19).

Claim 7 (Original)

7. The fluorescence microscope as defined in Claim 2, wherein in the event of a power failure at the microscope, current delivery to the excitation light source is automatically switched off.

Claim 8 (Original)

8. The fluorescence microscope as defined in Claim 3, wherein in the event of a power failure at the microscope, the dimmer for the excitation light source is automatically switched on.

Claim 9 (Original)

9. The fluorescence microscope as defined in Claim 4, wherein in the event of a power failure at the microscope, the shutter (6) is automatically closed.

Claim 10 (Currently Amended)

10. The fluorescence microscope as defined in Claim 4 ~~[[or 9]]~~, wherein the shutter (6) is closable by the force ~~[(F)]~~ of a spring (7).

Claim 11 (Currently Amended)

11. The fluorescence microscope as defined in Claim 4 ~~[[or 9]]~~, wherein the shutter (6) is closable by the force of gravity.

Claim 12 (Currently Amended)

12. The fluorescence microscope as defined in Claim 4 ~~[[or 9]]~~, wherein the shutter (6) is closable by means of elastic materials.

Claim 13 (Currently Amended)

13. The fluorescence microscope as defined in Claim 4 ~~[[or 9]]~~, wherein the shutter (6) is closable by magnetic force.

Claim 14 (Currently Amended)

14. The fluorescence microscope as defined in ~~one of Claims 4 through 6~~ Claim 4, wherein the shutter (6) is embodied as a rotary slide.

Claim 15 (Currently Amended)

15. The fluorescence microscope as defined in ~~one of Claims 4 through 6~~ Claim 4, wherein the shutter (6) is embodied as a linear mechanical stop ~~or as a rotary mechanical stop~~.

Claim 16 (Currently Amended)

16. The fluorescence microscope as defined in ~~one of the foregoing claims~~ Claim 1, wherein ~~different~~ at least two filter inserts (12) are arranged on a changeable filter carrier, e.g., a filter turret (11).

Claim 17 (Currently Amended)

17. The fluorescence microscope as defined in Claim 16, wherein different filter inserts (12) can be brought into ~~the~~ a working position by manual ~~or motorized~~ switching of the changeable filter ~~carrier~~ turret (11).

Claim 18 (Currently Amended)

18. The fluorescence microscope as defined in ~~one of the foregoing claims~~ Claim 1, wherein ~~[[a]]~~ the filter insert (12) is constituted from a combination of several individual filters (13, 14).

Claim 19 (Currently Amended)

19. The fluorescence microscope as defined in ~~one of the foregoing claims~~ Claim 1, wherein the filter insert (12) is embodied with at least one switching cam (19) which actuates a sensitive microswitch (20) with a closing function.

Claim 20 (Currently Amended)

20. The fluorescence microscope as defined in ~~one of the foregoing claims~~ Claim 1, wherein the filter insert (12) is equipped with at least one permanent magnet which, in the operating state, actuates a magnetic switch with a closing function.

Claim 21 (Currently Amended)

21. The fluorescence microscope as defined in ~~one of the foregoing claims~~ Claim 1, wherein the filter insert (12) is equipped with at least one electrically conductive contact surface which acts, in the operating state, as a switch (20).

Claim 22 (Currently Amended)

22. The fluorescence microscope as defined in ~~one of the foregoing claims~~ Claim 18, wherein at least one of the filters (13, 14) is equipped with an electrically conductive coating which acts, in the operating state, as a switch (20).

Claim 23 (Currently Amended)

23. The fluorescence microscope as defined in ~~one of the foregoing claims~~ Claim 1, wherein the filter insert (12) is embodied with at least one optical signal generator which makes the switch (20) switchable.

Claim 24 (Currently Amended)

24. The fluorescence microscope as defined in ~~one of the foregoing claims~~ Claim 4, wherein the shutter (6) is arranged not in the illumination beam path (2b) but in ~~[[the]]~~ an observation beam path (15).

Claim 25 (Currently Amended)

25. The fluorescence microscope as defined in ~~one of the foregoing claims~~ Claim 1, wherein it said fluorescence microscope is a stereomicroscope.

Claim 26 (New)

26. A fluorescence microscope as defined in Claim 2, wherein said coupling apparatus (19) is a mechanical apparatus.

Claim 27 (New)

27. A fluorescence microscope as defined in Claim 2, where said coupling apparatus (19) is an electrical apparatus.

Claim 28 (New)

28. A fluorescence microscope as defined in Claim 2, wherein said coupling apparatus (19) is an optical apparatus.

Claim 29 (New)

29. A fluorescence microscope as defined in Claim 2, wherein said coupling apparatus (19) is a magnetic apparatus.

Claim 30 (New)

30. The fluorescence microscope as defined in Claim 2, wherein upon insertion of the filter insert (12), a dimmer for the excitation light source (22) is switchable by insertion or removal of the filter insert (12) by means of the coupling apparatus (19).

Claim 31 (New)

31. The fluorescence microscope as defined in Claim 2, wherein upon insertion of the filter insert (12), a shutter (6) for the illumination beam path (2b) is switchable by insertion or removal of the filter insert (12) by means of the coupling apparatus (19).

Claim 32 (New)

32. The fluorescence microscope as defined in Claim 4, wherein in the operating state the shutter (6) is switchable by means of an electromagnet.

Claim 33 (New)

33. The fluorescence microscope as defined in Claim 5, wherein in the operating state the shutter (6) can be opened and held open by means of the electric motor (9) only when the electrical circuit necessary therefor is closed by the apparatus (19).

Claim 34 (New)

34. The fluorescence microscope as defined in Claim 32, wherein in the operating state the shutter (6) can be opened and held open by means of the electromagnet only when the electrical circuit necessary therefor is closed by the apparatus (19).

Claim 35 (New)

35. The fluorescence microscope as defined in Claim 9, wherein the shutter (6) is closable by the spring (7).

Claim 36 (New)

36. The fluorescence microscope as defined in Claim 9, wherein the shutter (6) is closable by force of gravity.

Claim 37 (New)

37. The fluorescence microscope as defined in Claim 9, wherein the shutter (6) is closable by means of elastic materials.

Claim 38 (New)

38. The fluorescence microscope as defined in Claim 9, wherein the shutter (6) is closable by magnetic force.

Claim 39 (New)

39. The fluorescence microscope as defined in Claim 4, wherein the shutter (6) is embodied as a rotary mechanical stop.

Claim 40 (New)

40. The fluorescence microscope as defined in Claim 16, wherein at least two filter inserts (12) can be brought into the working position by motorized switching of the changeable filter turret (11).